Pandemic Influenza The Local Perspective

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"The pandemic clock is ticking, we just don't know what time it is"

E. Marcuse

What is a flu pandemic?

- Infectious disease with no immunity in the population
- Local crisis in every part of the world
- Each locality must respond without expectation of mutual aid
- In contrast to typical natural disasters threatening the **physical** infrastructure an influenza pandemic may also pose significant threats to the **human** infrastructure responsible for critical community services
- Initial reliance on traditional public health approaches
- Goals:
 - Slow spread
 - Reduce adverse impact
 - Preserve social and economic order

Situation and Assumptions

- Future pandemics are likely; probably inevitable
- Strain could emerge in CA or elsewhere in US
- Pandemic likely to have several waves in each area
- Threats to economic, social and health care infrastructures
- Preventive/therapeutic measures- short supply
- Shortages in health care capacity, personnel and supplies

Potential Impact of Pandemic Flu in Los Angeles



- Serves as a guides for preparation and response to an outbreak and/or pandemic of influenza (flu) in LAC.
- Follows the general guidance of Federal Department of Health and Human Services (DHHS) and the California DHS pandemic flu plans.
- Will continue to evolve as new information and guidelines become available.
- Is Integrated into the LAC Public Health All Hazards Emergency Response Plan
- Summary at <u>lapublichealth.org</u>

- Identifies coordinating and cooperating agencies and their respective response roles
- Actions based on the phases of pandemic flu as defined by the World Health Organization (WHO).
- The essential components of the LAC DHS Pandemic Flu Plan are Surveillance, Laboratory, Vaccine Delivery, Antivirals, Strategies to Limit Transmission, Communications, and Emergency Response

SURVEILLANCE

■ The Acute Communicable Disease Control program (ACDC) regularly monitors flu and flu-like illness activity through a wide array of surveillance methods.

■ If there is a flu outbreak or pandemic flu in LAC, enhanced surveillance, notification, and response will be implemented

LABORATORY

- Laboratory testing, surveillance and data collection, communication issues and laboratory surge capacity are addressed for each WHO pandemic phase.
- LAC lab one of two in CA to perform H_5N_1 testing
- Laboratory-based surveillance will identify the predominant circulating types, subtypes, and strains of flu, aid clinical judgment, and help guide treatment decisions.

VACCINE DELIVERY

- Vaccine unlikely to be available in the early stages; lag time for availability may depend on updated manufacturing processes.
- DHHS guidelines: likely federal control over the distribution of vaccine according to pre-determined grouping and risks.
- LAC's Pandemic Plan will implement, and, when appropriate, locally adapt these guidelines. The LAC Plan contains provisions for vaccine storage and distribution.

ANTIVIRAL MEDICATIONS

- Current CDC recommendations for the priority use of limited supplies of antiviral medications (e.g., oseltamivir [Tamiflu]) are primarily for treatment,
- Changing information about the efficacy and safety of antiviral medications, along with concerns about the emergence of potential resistance, will require a flexible and evolving approach to the use of these medications in a pandemic flu setting.
- The LAC DHS has stockpiled some antiviral medications for immediate use in the event of a flu pandemic.

STRATEGIES TO LIMIT TRANSMISSION

- Isolation and quarantine
 - may have limited use in a flu pandemic due to
 - the short incubation period of influenza, (1-4 days)
 - flu transmission can occur before the onset of symptoms.
 - possible role in the initial identification of the first cases and outbreaks.

STRATEGIES TO LIMIT TRANSMISSION

- Additional voluntary isolation and quarantine measures
 - Home isolation of cases for a minimum of 7 days after disease onset.
 - Monitoring of contacts for fever and respiratory symptoms for 5 days after exposure.
 - Asking health care workers with a fever and have been previously exposed to not go to work.
 - Closure of schools and work places with high incidence of influenza—like illness (ILI)
 - Community-wide suspension of large public gatherings.

STRATEGIES TO LIMIT TRANSMISSION

- Overall, the most effective tool for reducing disease and controlling transmission in the population will be an aggressive public information campaign emphasizing:
 - hand washing
 - cough and sneeze etiquette
 - reduced social interactions
 - guidelines for those being cared for at home.

COMMUNICATIONS

- Key messages that can be used consistently to instill public confidence and generate an appropriate response to minimize risk and ensure a strong and rapid response.
- Key audiences and communication channels: the general public and major subpopulations, vulnerable population groups, hospitals, healthcare providers, businesses, educational institutions, policy makers, and public health officials.
- Community leaders representing multicultural and socio-economic backgrounds in LAC will be informed and included in these communication efforts.

EMERGENCY RESPONSE

- The Health Officer will be notified when a novel (new strain) flu virus with pandemic potential has reached LAC.
- Health Officer, in collaboration with the Emergency Medical Services (EMS), may call upon County/City agencies and others to assist with the management of the public health response. This may include
 - law enforcement
 - fire departments
 - social service and mental health agencies
 - local governments
 - Educational institutions
 - nongovernmental agencies
 - businesses

- EMERGENCY RESPONSE
 - HOSPITAL SURGE CAPACITY
 - Need for hospital beds will exceed the number of beds available.
 - Illness among health care workers likely to exacerbate staffing shortages
 - The LAC DHS Plan identifies key components of surge capacity and the ability to meet an increased demand.

Increased capacity can be generated by

- early discharge of patients
- transferring patients to lower levels of care
- canceling elective procedures and redirecting staff to the inpatient units most affected
- possibly suspending nurse staffing ratios
- extending work hours

Intensive Efforts Underway to Address:

- Surge Capacity
 - Hospitals
 - Shelters
 - Providers
 - Staffing
- Special/Vulnerable Populations
- Communications
 - Internal
 - Communities
 - Providers
 - Schools
 - Businesses
- Continuity of Operations
 - Governmental
 - Infrastructure

Questions

